

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,470	03/26/2004	Takahiro Naka	448563/0245	4001
	7590 02/14/2007	EXAMINER ·		
Lawrence Rosenthal Stroock & Stroock & Lavan LLP			VO, ANH T N	
180 Maiden La New York, NY			ART UNIT	PAPER NUMBER
New Tork, IN I	10036		2861	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	02/14/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
		10/811,470	NAKA ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Anh T.N. Vo	2861			
	The MAILING DATE of this communication app	J.,	the correspondence address			
Period fo						
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Donsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a reply vill apply and will expire SIX (6) MONTH: , cause the application to become ABAN	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>27 N</u>	ovember_2006.				
2a)□	This action is FINAL . 2b) This action is non-final.					
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.			
Dispositi	on of Claims					
5)⊠ 6)⊠ 7)□	Claim(s) 1-72 is/are pending in the application 4a) Of the above claim(s) 37,38,41-45,48-59 as Claim(s) 1-35,39,40,46 and 60-65 is/are allowed Claim(s) 36 and 47 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	nd 66-72 is/are withdrawn fro ed.	m consideration.			
Applicati	on Papers	•				
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Example 1.	epted or b) objected to by drawing(s) be held in abeyance tion is required if the drawing(s)	. See 37 CFR 1.85(a) is objected to. See 37 CFR 1.121(d).			
Priority ι	ınder 35 U.S.C. § 119	•				
12)⊠ a)l	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureace the attached detailed Office action for a list	s have been received. s have been received in App rity documents have been re u (PCT Rule 17.2(a)).	lication No ceived in this National Stage			
2) 🔲 Notic	et(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/N	nmary (PTO-413) Mail Date mal Patent Application			
Pape	r No(s)/Mail Date <u>3/7/05, 1/27/06, 4/7/07</u> .	6) 🔲 Other:				

Page 2

Application/Control Number: 10/811,470

Art Unit: 2861

DETAILED ACTION

Election /Restriction

1. Claims 37, 38, 41-45, 48-59 and 66-72 are withdrawn from further consideration pursuant to 37 CFR1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

2. Applicant's election with traverse of species 5 filed 11/27/2006 is acknowledged. The traversal is on the ground(s) that there would not be undue burden in examining species 1-16 in a single application and the disclosed embodiments are not species, as described by the MPEP and so are also drawn to a single embodiment of the invention. This argurement is not found persuasive. Because the species are independent or distinct, each species contains its own structural limitations that make them distinct from each other.

The requirement is still deemed proper and is therefore made FINAL.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

Claim Objection

Claim 39 is objected to because of the following informalities:

In claim 39:

• Line 7, "a" should be changed to --the--.

Application/Control Number: 10/811,470 Page 3

Art Unit: 2861

• Line 8, "a" at first occurrence should be changed to --the--.

- Line 10, "a" should be changed to --the--.
- Line 11, "a" should be changed to --the--.

Appropriate correction is required.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 36 is rejected under 35 USC 102 (b) as being anticipated by Childers et al. (US Pat. 6,322,205).

Childers et al. disclose in Figure 1 an ink delivery system comprising:

- a container body (12) which stores the liquid in its inside, the container body including:
- a pressurized fluid introduction port (28) for introducing the pressurized fluid to the inside;
- a liquid delivery port (30) for delivering the liquid to the outside; and
- a detection unit (36) which is provided in the container body (12) and outputs an output signal which is changed in accordance with a change in pressure of the liquid in the inside of the container body (12).

Claim 47 is rejected under 35 USC 102 (b) as being anticipated by Baker et al. (US Pat. 6,243,115).

Baker et al. disclose in Figures 3-4 an delivery system for an ink jet printer comprising:

Art Unit: 2861

- a tank unit which includes a sealed liquid reservoir chamber (54) for storing the liquid (ink), and a liquid delivery port (70) communicating with the liquid reservoir chamber (54) and for delivering the liquid (ink) to the outside of a liquid container (46) and in which a volume of the liquid reservoir chamber (54) is changed in accordance with an amount of the liquid (ink) stored in the inside thereof; and

- a pressurizing unit which includes a sealed pressurizing chamber (48) into which the pressurized fluid (air) is introduced to change a volume, and a pressurized fluid introduction port (68) communicating with the pressurizing chamber (48) and for introducing the pressurized fluid (air) to the inside of the pressurizing chamber (48), and is constructed to pressurize the liquid reservoir chamber (54) of the tank unit by a volume change of the pressurizing chamber (48).

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The prior art references (US Pat. 6,773,099; US Pat. 5,646,666; US Pat. 4,558,326; US Pat. 6,454,375) cited in the PTO 892 form show an ink jet printer that is deemed to be relevant to the present invention. These references should be reviewed.

Allowable Subject Matter

Claims 1-35 are allowable. These claims would be allowable because the prior art fails to teach or suggest a liquid container containing liquid to be supplied to a liquid consuming apparatus comprising a container body that contains a first reservoir chamber and a second reservoir chamber, both chambers are at least in part defined by a first flexible member and a second flexible member and are in liquid communication by a first flow path, a second flow path through which the second reservoir chamber is in fluid communication with a liquid delivery port of the container body, wherein the second reservoir chamber expands to cause the second flexible member to reach a first position when pressure is applied through the first flexible member to the liquid existing a predetermined amount or more in the first reservoir

Application/Control Number: 10/811,470

Art Unit: 2861

chamber in the combination as claimed.

Claims 39-40 are allowable. These claims would be allowable because the prior art fails to teach or suggest a liquid container constructed such that a pressure is applied to liquid in a liquid containing chamber by a pressure of a pressurized fluid fed from a pressurized fluid introduction port to feed the liquid to a liquid consuming apparatus from a liquid delivery port comprising a buffer chamber that is expanded in its volume by an inflow of the liquid from the liquid containing chamber to the buffer chamber, and contracted when the inflow of the liquid from the liquid containing chamber to the buffer chamber is stopped and a detecting unit adapted to detect a volume variation of the buffer chamber in the combination as claimed.

Claim 46 is allowable. These claims would be allowable because the prior art fails to teach or suggest a liquid container storing therein liquid to be supplied to a liquid consuming apparatus comprising a second reservoir chamber which is formed in the inside of a container body, communicates with a first reservoir chamber and a liquid delivery port of the container body, and includes a second flexible film constituting a part of a wall forming the second reservoir chamber and in which the second flexible film seals a substantially circular or regular polygonal opening formed by the rigid wall forming the second reservoir chamber, and the pressure of the pressurized fluid applied to the liquid in the first reservoir chamber is transmitted through the liquid to the liquid in the inside of the second reservoir chamber; a second pressurizing unit which pressurizes the liquid in the second reservoir chamber to deliver the liquid from the liquid delivery port in a state where the liquid in the first reservoir chamber is consumed and the pressure of the pressurized fluid is not transmitted to the liquid in the inside of the first reservoir chamber, and includes a press member for pressing the second flexible film toward a direction of decreasing a volume of the second reservoir chamber in the combination as claimed.

Claims 60-65 are allowable. These claims would be allowable because the prior art fails to teach or suggest a liquid container comprising a second liquid reservoir chamber which is formed in the inside of the container body and communicates with the first liquid reservoir

Art Unit: 2861

chamber and in which the pressure of the pressurized fluid applied to the liquid in the inside of the first liquid reservoir chamber is transmitted through the liquid to the liquid in the inside of the second liquid reservoir chamber and its volume is changed in accordance with pressure of the liquid in the inside changed by transmission of the pressure of the pressurized fluid; and a narrow flow path which is formed at a midway of a liquid flow path communicating the first liquid reservoir chamber and the liquid delivery port, and is openably closed by a movable part displaced in accordance with the change of the volume of the second liquid reservoir chamber in a state where the liquid in the first liquid reservoir chamber is not pressurized by the pressurized fluid in the combination as claimed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M.to 7:00 P.M.. The fax number of this Group 2861 is (571) 273-8300.

PRIMARY EXAMINER

February 08, 2007